

Title (en)
APPARATUS FOR RAPIDLY COOLING METALLIC PIPES

Publication
EP 0059675 B1 19841227 (FR)

Application
EP 82420026 A 19820224

Priority
FR 8104380 A 19810227

Abstract (en)
[origin: ES8302790A1] The device according to the present invention is an improvement on the conventional devices for quenching metal tubes (3) by immersion into a tank (4) of liquid at ambient temperature. This device comprises in particular a deflector (18) positioned below the tube at the time of its immersion. This deflector distributes the contact of the cooling fluid on the surface of the tube (3). It allows a more homogeneous cooling and avoids asymmetric deformations of the tube (3). An air injection system fastened to the end of the tube to be treated is associated with this deflector. This device will be particularly useful in installations for treating very long, thin tubes.

IPC 1-7
C21D 9/08; **C21D 1/63**

IPC 8 full level
C21D 1/00 (2006.01); **C21D 1/18** (2006.01); **C21D 1/62** (2006.01); **C21D 1/63** (2006.01); **C21D 9/08** (2006.01)

CPC (source: EP US)
C21D 1/63 (2013.01 - EP US); **C21D 9/085** (2013.01 - EP US)

Cited by
CN109182686A; CN113531969A

Designated contracting state (EPC)
AT DE GB IT SE

DOCDB simple family (publication)
EP 0059675 A1 19820908; **EP 0059675 B1 19841227**; AT E10950 T1 19850115; DE 3261660 D1 19850207; ES 509939 A0 19830116; ES 8302790 A1 19830116; FR 2500849 A1 19820903; FR 2500849 B1 19860606; JP S57164927 A 19821009; JP S6112973 B2 19860411; SU 1190994 A3 19851107; US 4373703 A 19830215

DOCDB simple family (application)
EP 82420026 A 19820224; AT 82420026 T 19820224; DE 3261660 T 19820224; ES 509939 A 19820226; FR 8104380 A 19810227; JP 2978182 A 19820225; SU 3395195 A 19820225; US 34905082 A 19820216